

The Effect of Age on Student Reasons for Continuing or Discontinuing
Membership in School String Ensembles

by

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Abstract

This study sought to discover what reasons were important to students when deciding to continue membership in a school orchestra program. A survey was developed by the researcher, based on ten predicting factors of continuation or discontinuation identified by Allen (1981), Morehouse (1987), and Papinchak (1992). Orchestra students in grades six through twelve ($N = 65$) responded to this survey first by checking from a list the reasons they thought “other students” would continue or discontinue with orchestra, and then by indicating how important each reason was to their own decision on a five point Likert-type scale. The main difference found between middle school and high school responses is the degree to which reasons emerged as significant; the differences between the reasons were larger for older students. Also, it appeared that middle schoolers were more concerned with strictly musical aspects of orchestra class, while high schoolers placed importance on both musical and extra-musical aspects.

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Definitions

- Continuer* a student who is not a discontinuer by the definition below.
- Discontinuer* a student who did not indicate intent to re-enroll in school orchestra, even if he or she intends to participate in music in some other context.
- First year player* a student in his or her first year of playing a stringed instrument. In this study, all first year players were sixth graders who did not have previous string instruction through private lessons or community youth orchestras.
- High school student* a student in the ninth, tenth, eleventh, or twelfth grade.
Abbreviated "H.S."
- Middle school student* a student in the sixth, seventh, or eighth grade.
Abbreviated "M.S."

Chapter I Introduction

Orchestra research is an area of music education research that is still developing. Relatively few studies have been conducted on the topic of stringed instruments or the students who play them, and some of the most active string researchers have examined specific techniques rather than student participation in ensembles (Geringer & Allen, 2004; Geringer, Allen, & MacLeod, 2005; Geringer, MacLeod, & Allen, 2010; Geringer & Witt, 1985; Gillespie, 1987, 1988, 1989, 1991, 1997; Hamann, Frost, & Wieters, 2002; Hamann, Lauver, & Asher, 2006; Smith, 1985, 1987, 1995). Existing studies regarding student membership in the school orchestra sought to discover predicting factors, i.e. traits that correlated to students' decisions to continue or discontinue (Allen, 1981; Morehouse, 1987; Papinchak, 1982). The current study sought to ask students how accurately these previously identified factors reflected their reasoning for continuing in orchestra. Also, the current study examined the effect that grade level had on student response, a variable in string research examined thus far only by Allen (1998), who concluded that further research involving age level is necessary.

The purpose of this study is to discover which predicting factors students consider to be important in deciding to continue in the school orchestra, and to discover whether these reasons vary with age. The results of this study may guide school orchestra teachers in designing their programs for more successful recruitment and retention.

Chapter II

Review of Related Research

Overall Experience of Being in School Music

The desire of teachers to understand what students draw from participation in school music is a strong one, such that studies have even been conducted on how to design studies to obtain this information (Warnock, 2004). Hylton (1981) conducted interviews with high school choral students; he discovered that there were several facets to the meaning students found in their music experience. These dimensions were Achievement, Spiritualistic, Musical–Artistic, Communicative, Psychological, and Integrative. Similarly, Adderly, Kennedy, and Berz (2003) found that high school students reported musical, academic, psychological, and social benefits from participation in choir, orchestra, or band. Students enrolled in compulsory general music classes reported that their participation provided multi-faceted benefits in vocational purpose, academic purpose, a sense of belongingness, and self esteem (Wayman, 2006).

In exploring students' feelings about membership in school music ensembles, Eckel (1995) discovered mostly psychological aspects. When asked to provide rationale for participation in school music ensembles, high school instrumentalists provided psychological or social benefits as the four most frequent responses. These rationales were "being part of a group, stress release, music as a different part of the school day, and fun." In a general psychology study, North, Hargreaves, and O'Neill (2000) studied British adolescents' perceptions of musical importance. The

main conclusion was that music, whether popular or classical, was valuable to adolescents “because it allows them to... satisfy their emotional needs.” However, they also found that students perceived classical music to be beneficial mostly as a means to appease adults. Similarly, young instrumentalists tended to be more parent- or teacher-driven in their music making while older students became more intrinsically motivated (Davidson, Sloboda, & Howe, 1995).

The structure of a teacher’s program can impact the kind of experience a student has in a school ensemble. For example, Bruenger (2002) observed a non-select choir in which the director operated with a cooperative goal structure, meaning that praise or criticism was given to the group as a whole rather than to individual singers, which created a safe community. When asked to indicate how good a musician they were, students ranked themselves, on average, in the top twenty percent of the class, a pleasant but surprisingly high result. Bruenger (2009) further researched cooperative goal structure, observing the concept at work in an elementary program known to produce successful and motivated musicians. An opposing structure can be seen in the case study of “Lindy,” a middle school clarinetist (Scheib, 2006). Her band program was driven by individual accomplishment and competition instead of a cooperative goal; in describing her experience, Lindy talked nearly exclusively of technical progress while omitting emotional or social aspects of her ensemble membership.

Frederickson (1997) explained that when discussing student reasons for wanting to participate in an ensemble, it is important to distinguish between “good” and “real” rationales. “Good” reasons tended to be loftier in character or what a

student assumes he or she is supposed to cite, while “real” reasons tended to be more self-centered and pragmatic. An example of the latter is that “music class is fun and less serious than other classes (Wayman, 2004).” Interestingly, participants in the only exclusively-strings study in this portion of the literature review cited both “good” and “real” aspects of their membership in orchestra (Neill, 2005). While the students’ three most frequent motivations to participate dealt with acquiring musical knowledge and performing, the most frequently cited “favorite aspect of high school orchestra experience” was the ability to go on out-of-town trips. The next-favorite aspect was “being with friends.”

Continuing or Discontinuing in School Music

Non-string Instruction. Sichivitsa (2003; 2004) applied a model for dropout prediction to university choral students and with elementary choral students. Both studies determined that the greatest predicting factor for continuation is that students valued music, probably as the result of a healthy support system that encouraged musical activity. For students who planned to drop out or were unsure of their choice, the decision was typically based upon non-musical factors. Stewart (2005) concluded that students who found band valuable were more likely to continue with the program, which confirmed Sichivitsa’s research with choral students (2003; 2004). Stewart also found that students who took private lessons and enjoyed performing were likely to continue in band, while a student’s perceived sight-reading or playing skills were not significant factors.

However, in examining elementary music dropouts, Martignetti (1965) found that the most frequently cited reason for discontinuation was that the student's instrument was too difficult to play. Another study of elementary-aged participants found that group instruction vs. individual instruction had no significant effect upon a student's continuation with music, which may indicate that social or peer interactions were not important (McCarthy, 1980). The same study also found no significant relationship between teacher influence and a student's likelihood to continue in music. This is a direct contradiction of the results of Costa-Giomi, Flowers, & Sasaki (2005), whose study indicated that dropouts from beginning piano instruction had not received as much teacher approval during lessons as did their continuing peers, even though those students sought teacher approval more frequently than students continuing with lessons.

Some studies focused strictly on non-music predicting factors for continuing or discontinuing in school music ensembles. Cutietta and McAllister (1997) found that in terms of personality variables, middle and high school instrumentalists did not vary significantly from the general population, though woodwind and percussion personalities tended to be more diverse at the beginning of instruction and homogenize with age. This may suggest that more extreme personalities tend to drop in older grades; it also may suggest that student motivations for ensemble participation change with age. In examining urban band students, Kinney (2010) discovered academic success to be the most significant factor in predicting a student's decision to continue, a result that corroborated the earlier findings of Corenblum and Marshall (1998). Kinney suggests that academically excellent

students may be more likely to excel in music, and that excellent music students are more likely to continue their studies.

String Instruction. Existing strings research has examined both internal and external factors related to student dropout or retention. Research conducted by Mowery (1993) indicated that there were fundamental personality differences between continuing and discontinuing orchestra students, as well as between younger and older students. These differences were in how students perceived information; students with a less mature sense of perception were more likely to drop out than students with a more developed sense of perception. Perkins (1998) found that younger students' participation was motivated more by individual task mastery, while older students' participation was motivated more by a desire to demonstrate competence through competition.

In predicting orchestra dropouts, Hartley (1996) found that sixth grade beginners were more likely to discontinue than fifth grade beginners after their first year of study. However, significance was not found past the first year. In a later study, it was determined that older beginners were significantly more likely to continue orchestra membership, and that significance continued beyond the first year (Hartley, 2009). These results contrasted with the findings of the original study. Hurley (1995) reported that students who discontinued orchestra instruction did so because the costs of participation became too heavy; those costs included time away from other activities, difficulty of playing an instrument, and fear of poor grades. "Continuing students noted that the eventual cost of

participation in [orchestra] might be a consideration in choosing the course in the future (Hurley, 1995).”

Three studies sought to identify an overarching set of factors that predict continuation or discontinuation with orchestra (Allen, 1981; Morehouse, 1987; Papinchak, 1992). Predicting factors common to all three studies were teacher influence, musical ability, and peer influence or presence of friends in strings class. Factors shared by two of the three studies were parental influence or support, condition or availability of a instrument, playing in concerts, and enjoying the performance of repertoire on the chosen instrument. Unique to the findings of Morehouse (1992) was the identification of academic grades or enrollment in private lessons as predicting factors.

Results from a pilot for this study, in which students were surveyed about the aforementioned reasons, suggested that middle and high schoolers do indicate differing reasons for their decisions to continue membership in the school orchestra (Farrar, 2011). Middle schoolers placed a higher importance on their parents’ wishes and the opportunity to perform in concerts outside of class than did high schoolers. High schoolers indicated “because their friends are in orchestra” with significant frequency when asked about reasons other orchestra students continue in orchestra, but middle schoolers marked this reason with a significantly higher personal importance rating. Affordability or availability of an instrument was indicated with low frequency and low importance for both age groups, though previous studies identified this factor as a significant predictor of orchestra membership (Allen, 1981; Morehouse, 1987; Papinchak, 1992).

Chapter III Methodology

Participants ($N = 65$) were sixth through twelfth graders enrolled in orchestra programs in five schools within a single public district. Middle school participants ($n = 34$) and high school participants ($n = 31$) were surveyed by the researcher during a campus visit to each participating orchestra program. Schools were recruited by emailing teachers at addresses found on publicly available school websites; a copy of the recruitment email may be found in Appendix B, page 55. Of the twelve directors contacted, five consented to a campus visit; two wished not to participate; and the remainder did not respond. Once a cooperating director and the researcher had coordinated a meeting time, the parental consent and student assent forms were emailed in PDF format to be distributed to the students. All consent and assent forms were approved through the Texas Tech University Institutional Review Board for the Protections of Human Subjects. Approval letters and the forms appear in Appendix A, page 53, and Appendix C, page 57, respectively.

Survey

Data were collected using a researcher-designed survey in four parts. The survey instrument was reviewed for content and clarity by music education faculty and graduate students ($n = 17$), and changes were made until a consensus was reached. Then, it was piloted with sixth grade students ($n = 6$) who were known to the researcher, were members of music ensembles in their schools, and were not

currently enrolled in any school involved with the present study. This procedure confirmed that the survey instrument was appropriate.

Part I asked for background information, which included students' current grade level, grade level at the beginning of string instruction, current instrument, how likely they were to continue membership in orchestra, and a free-response area to "tell the story of how" they initially decided to join the school orchestra. The complete survey can be found in Appendix D, page 60.

Part II, an excerpt from which appears in Figure 1, asked participants why other students might decide to take orchestra next year. They checked reasons from a list adapted from the predicting factors identified by Allen (1981), Morehouse (1987), and Papinchak (1992). These ten factors were parental influence, student's perceived musical ability, availability of instruments, attitude toward strings teacher, attitude toward performing in after-school concerts, attitude toward class repertoire, peer influence from outside of the orchestra, peer influence from within the ensemble, scheduling concerns, and changing teachers. After selecting and marking continuation reasons, the participants were also asked to indicate why other students may discontinue with orchestra. These reasons were modeled exactly after the first set, but worded from the opposite perspective.

6. If other students decide to take orchestra next year, what reasons might be important to them?
 — Check as many or as few boxes as you need.

That’s what their parents want

They think they are good musicians

Their family can afford to buy/rent an instrument

...

7. If other students decide not to take orchestra next year, what reasons might be important to them?
 — Check as many or as few boxes as you need.

That’s what their parents want

They think they are bad musicians

Their family cannot afford to buy/rent an instrument

Figure 1. Survey excerpt, partial list of reasons

Part III, an excerpt from which appears in Figure 2, examined participants’ personal reasons for continuing their membership in orchestra. Students were presented the same ten reasons as before, but this time were asked to rate the personal importance of each reason using a five-point Likert scale. In the case that a discontinuing student were taking the survey, he or she was instructed to imagine how a continuing classmate might answer this portion of the survey.

Why might you take orchestra next year?

8. Because that’s what my parents want.

1	2	3	4	5
not important to me		so-so		very important to me

9. Because I think I am a good musician.

1	2	3	4	5
not important to me		so-so		very important to me

Figure 2. Survey excerpt, Likert questions

Part IV examined participants' personal reasons for discontinuing their membership in orchestra. Students were presented the same ten reasons that appeared in Part III, worded from the perspective of a discontinuer; continuing students were instructed to imagine how a discontinuing classmate might answer this portion of the survey. However, since only three students indicated their intention to discontinue, no further analysis was performed on this section of the survey.

A pilot study using this survey instrument was conducted at a single high school ($n = 18$) and single middle school ($n = 15$) in order to test procedures and evaluate student responsiveness to the survey (Farrar, 2011). No changes in procedures were deemed necessary, therefore these data were combined with those from subsequent campus visits.

At four of the five campus visits, the researcher took all students who had returned parental consent forms into an office or practice room to administer the survey. The exception was one school in which the director preferred the survey took place in the rehearsal hall while non-participating students silently practiced their music. In all instances, the survey was administered at the beginning of class and lasted no longer than fifteen minutes. A script was prepared to ensure that all students received the same introduction and instructions; this script appears in Appendix E, page 65. Upon completion of the survey, students handed the completed forms directly to the researcher and returned to class.

Resulting data subsequently were analyzed to examine the following questions:

1. Which continuation/discontinuation reasons were selected more frequently and with higher importance by all participants?
2. Which continuation/discontinuation reasons were selected more frequently and with higher importance by high school students?
3. Which continuation/discontinuation reasons were selected more frequently and with higher importance by middle school students?
4. In what ways did middle and high school students respond differently to the survey?
5. Did a student's status as a "first year player" have an effect upon survey responses?
6. What themes emerged from the free-response areas of the survey, and to what degree were those themes related to age or continuation in orchestra?

Chapter IV Results

Data consisted of nominal responses to the checklists of other student's reasons to continue or discontinue; ordinal responses to the Likert-type questions of personal reasons to continue; and qualitative free-responses to the prompts of "how you decided to join orchestra" and "there are more reasons." Groups used for analysis were total participants ($N = 65$), high school continuers ($n = 26$), middle school continuers ($n = 31$), and first-year continuers ($n = 11$). Only three middle schoolers indicated that they were unlikely to take orchestra next year, and all five high schoolers who were unlikely to continue with orchestra were twelfth graders. Since these students were graduating out of the program rather than discontinuing membership, they were not considered "discontinuers" for the purpose of this analysis.

Research Question #1.

Which continuation/discontinuation reasons were selected more frequently and with higher importance by all participants?

Chi-square analysis of the frequency of reasons other students continue indicated an extremely significant difference in which reasons were selected ($\chi^2 [9, N = 65] = 39.455, p < .0001$). The specific continuation reasons and their frequencies may be found in Table 1. Subsequent Chi-square multiple comparisons revealed that "my friends are in orchestra" was selected significantly more often than all other

reasons except “I like the kind of music we play.” A complete listing of multiple comparisons results may be found in Table 2.

Table 1
All Participants’ Responses, Reasons Other Students Continue

<u>Continuation Reason</u>	<u>Frequency</u>
My friends are in orchestra	57
I like the kind of music we play	43
I like my orchestra teacher	36
I think I am a good musician	36
I like performing in concerts outside of class	35
That’s what my parents want	34
I have room in my schedule for it	30
I will have the same orchestra teacher next year	26
My family can afford to buy/rent an instrument	17
Orchestra is something that is “cool” at school	16

Table 2
All Participants' Responses, Multiple Comparisons, Reasons Other Students Continue

Continuation Reason	Was More Frequent Than...	<i>p</i>
My friends are in orchestra	My family can afford to buy/rent my instrument	< .0001 *
	Orchestra is something that is "cool" at my school	< .0001 *
	I will have the same orchestra teacher next year	.0007 *
	I have room in my schedule for it	.0038 *
	That's what my parents want	.0159 *
	I like performing in concerts outside of class	.0218 *
	I like my orchestra teacher	.0294 *
	I think I am a good musician	.0294 *
I like the kind of music we play	Orchestra is something that is "cool" at school"	.0004 *
	My family can afford to buy/rent my instrument	.0008 *
	I will have the same orchestra teacher next year	.0407 *
I like my orchestra teacher	Orchestra is something that is "cool" at school"	.0055 *
	My family can afford to buy/rent my instrument	.0091 *
I think I am a good musician	Orchestra is something that is "cool" at school"	.0055 *
	My family can afford to buy/rent my instrument	.0091 *
I like performing in concerts outside of class	Orchestra is something that is "cool" at school"	.0078 *
	My family can afford to buy/rent my instrument	.0126 *
That's what my parents want	Orchestra is something that is "cool" at school"	.0109 *
	My family can afford to buy/rent my instrument	.0173 *
I have room in my schedule for it	Orchestra is something that is "cool" at school"	.0390 *
	My family can afford to buy/rent my instrument	.0579

* significant at < .05

Chi-square analysis of the list of reasons other students discontinue indicated a highly significant difference in the frequency with which reasons were selected ($X^2 [9, N = 65] = 27.617, p = .0011$). The specific discontinuation reasons and their frequencies may be found in Table 3. Subsequent Chi-square multiple comparisons revealed that “I will have a different orchestra teacher next year” and “that’s what my parents want” were indicated less frequently than most other reasons. A complete listing of multiple comparisons results may be found in Table 4.

Table 3
All Participants’ Responses, Reasons Other Students Discontinue

Discontinuation Reason	Frequency
I do not have room in my schedule for it	46
I do not like my orchestra teacher	41
My friends are not in orchestra	40
My family cannot afford to buy/rent my instrument	38
Orchestra is something that is “un-cool” at school	36
I do not like the kind of music we play	35
I think I am a bad musician	35
I do not like performing in concerts outside of class	31
That’s what my parents want	19
I will have a different orchestra teacher next year	13

Table 4
All Participants' Responses, Multiple Comparisons, Reasons Other Students Discontinue

Discontinuation Reason	Was More Frequent Than...	<i>p</i>
I do not have room in my schedule for it	I will have a different orchestra teacher next year	< .0001 *
	That's what my parents want	.0008 *
I do not like my orchestra teacher	I will have a different orchestra teacher next year	.0005 *
	That's what my parents want	.0045 *
My friends are not in orchestra	I will have a different orchestra teacher next year	.0002 *
	That's what my parents want	.0063 *
My family cannot afford to buy/rent my instrument	I will have a different orchestra teacher next year	.0005 *
	That's what my parents want	.0118 *
Orchestra is something that is "un-cool" at my school	I will have a different orchestra teacher next year	.0010 *
	That's what my parents want	.0219 *
I do not like the kind of music we play	I will have a different orchestra teacher next year	.0015 *
	That's what my parents want	.0295 *
I think I am a bad musician	I will have a different orchestra teacher next year	.0015 *
	That's what my parents want	.0295 *
I do not like performing in concerts outside of class	I will have a different orchestra teacher next year	.0067 *

* significant at < .05

Kruskal-Wallis One-Way Analysis of Variance was used to analyze the Likert ratings of personal continuation reasons. An extremely significant difference was found ($H [9, 65] = 80.0980, p < .0001$). Specific continuation reasons can be found in

Table 5, listed in order of importance according to mean ranks determined by the Kruskal-Wallis One-Way Analysis of Variance. Multiple comparisons were calculated with the Siegal and Castellan test; the minimum difference in ranks necessary for significance was 54.02. A complete listing of multiple comparisons results may be found in Table 6.

Table 5
All Participants' Responses, Reasons I Continue

<u>Continuation Reason</u>	<u>Kruskal-Wallis Mean Rank</u>
I like performing in concerts outside of class	415.1825
I like the kind of music we play	393.7000
I like my orchestra teacher	381.1429
I think I am a good musician	370.8154
I have room in my schedule for it	338.7462
My friends are in orchestra	316.3769
My family can afford to buy/rent my instrument	286.3231
I will have the same orchestra teacher next year	280.9692
That's what my parents want	237.9615
Orchestra is something that is "cool" at school	218.3729

Table 6
All Participants' Responses, Multiple Comparisons, Reasons I Continue

Continuation Reason	Was More Important Than...	<i>p</i>
I like performing in concerts outside of class	That's what my parents want	
	My family can afford to buy/rent my instrument	< .001
	Orchestra is something that is "cool" at my school	
	I will have the same orchestra teacher next year	
	My friends are in orchestra	< .01
	I have room in my schedule for it	< .05
I like the kind of music we play	That's what my parents want	
	My family can afford to buy/rent my instrument	< .001
	Orchestra is something that is "cool" at my school	
	I will have the same orchestra teacher next year	
	My friends are in orchestra	< .01
	I have room in my schedule for it	< .05
I like my orchestra teacher	That's what my parents want	< .001
	Orchestra is something that is "cool" at my school	
	My family can afford to buy/rent my instrument	< .01
	I will have the same orchestra teacher next year	
I think I am a good musician	My friends are in orchestra	< .05
	That's what my parents want	< .001
	Orchestra is something that is "cool" at my school	
	My family can afford to buy/rent my instrument	< .01
I have room in my schedule for it	I will have the same orchestra teacher next year	
	Orchestra is something that is "cool" at my school	< .001
	That's what my parents want	< .01
My friends are in orchestra	I will have the same orchestra teacher next year	< .05
	Orchestra is something that is "cool" at my school	< .01
That's what my parents want		
My family can afford to buy/rent my instrument	Orchestra is something that is "cool" at my school.	< .05

When listed in order of response frequency and importance rating, most of the continuation reasons held the same approximate position. However, “I like performing in concerts outside of class” was ranked first in terms of frequency, but only fifth in terms of importance ratings. “That’s what my parents want” was also ranked higher on the frequency list than on the importance ratings list, moving from sixth place to next-to-last.

Research Question #2.

Which continuation/discontinuation reasons were selected more frequently and with higher importance by high school continuers?

Chi-square analysis of the frequency of reasons other students continue indicated an extremely significant difference in which reasons were selected ($X^2 [9, N = 26] = 31.296, p = .0003$). The specific continuation reasons and their frequencies may be found in Table 7. Subsequent Chi-square multiple comparisons revealed that “my friends are in orchestra” and “I like the kind of music we play were selected significantly more often than several other reasons; “orchestra is something that is ‘cool’ at my school” and “my family can afford to buy/rent my instrument” were selected less often than most other reasons. A complete listing of multiple comparisons results may be found in Table 8.

Table 7
High School Continuers' Responses, Reasons Other Students Continue

<u>Continuation Reason</u>	<u>Frequency</u>
My friends are in orchestra	25
I like the kind of music we play	18
I like my orchestra teacher	18
I have room in my schedule for it	17
That's what my parents want	17
I think I am a good musician	14
I will have the same orchestra teacher next year	10
I like performing in concerts outside of class	8
My family can afford to buy/rent my instrument	5
Orchestra is something that is "cool" at my school.	3

Table 8
High School Continuers' Responses, Multiple Comparisons, Reasons Other Students Continue

Continuation Reason	Was More Frequent Than...	<i>p</i>
My friends are in orchestra	Orchestra is something that is "cool" at my house	< .0001 *
	My family can afford to buy/rent my instrument	.0003 *
	I like performing in concerts outside of class	.0031 *
	I will have the same orchestra teacher next year	.0112 *
I like the kind of music we play	Orchestra is something that is "cool" at my school	.0011 *
	My family can afford to buy/rent my instrument	.0067 *
	I like performing in concerts outside of class	.0499 *
I like my orchestra teacher	Orchestra is something that is "cool" at my school	.0011 *
	My family can afford to buy/rent my instrument	.0067 *
	I like performing in concerts outside of class	.0499 *
I have room in my schedule for it	Orchestra is something that is "cool" at my school	.0017 *
	My family can afford to buy/rent my instrument	.0105 *
That's what my parents want	Orchestra is something that is "cool" at my school	.0017 *
	My family can afford to buy/rent my instrument	.0105 *
I think I am a good musician	Orchestra is something that is "cool" at my school	.0076 *
	My family can afford to buy/rent my instrument	.0339 *
I will have the same orchestra teacher next year	Orchestra is something that is "cool" at my school	.0522

* significant at < .05

Chi-square analysis of the list of reasons other students discontinue indicated a significant difference in the frequency with which reasons were selected ($X^2 [9, n = 26] = 19.882, p = .0187$). The specific discontinuation reasons and their frequencies may be found in Table 9. Chi-square multiple comparisons revealed "I do not have room in my schedule for it" was selected more often than several other reasons;

“that’s what my parents want” was selected less frequently than most other reasons.

A complete listing of multiple comparisons results may be found in Table 10.

Table 9
High School Continuers’ Responses, Reasons Other Students Discontinue

<u>Discontinuation Reason</u>	<u>Frequency</u>
I do not have room in my schedule for it	23
I do not like my orchestra teacher	18
Orchestra is something that is “un-cool” at my school	16
My friends are not in orchestra	15
I do not like the kind of music we play	15
My family cannot afford to buy/rent my instrument	14
I do not like performing in concerts outside of class	13
I think I am a bad musician	12
I will have a different orchestra teacher next year	6
That’s what my parents want	4

Table 10
High School Continuers' Responses, Multiple Comparisons, Reasons Other Students Discontinue

Discontinuation Reason	Was More Frequent Than...	<i>p</i>
	That's what my parents want	.0003 *
I do not have room in my schedule for it	I will have a different orchestra teacher next year	.0016 *
	I am a bad musician	.0630
I do not like my orchestra teacher	That's what my parents want	.0028 *
	I will have a different orchestra teacher next year	.0143 *
Orchestra is something "un-cool" at my school	That's what my parents want	.0073 *
	I will have a different orchestra teacher next year	.0330 *
My friends are not in orchestra	That's what my parents want	.0116 *
	I will have a different orchestra teacher next year	.0495 *
I do not like the kind of music we play	That's what my parents want	.0116 *
	I will have a different orchestra teacher next year	.0495 *
My family cannot afford to buy/rent my instrument	That's what my parents want	.0184 *
I do not like performing in concerts outside of class	That's what my parents want	.0290 *
I think I am a bad musician	That's what my parents want	.0455 *

* significant at < .05

Kruskal-Wallis One-Way Analysis of Variance was used to analyze the Likert ratings of personal continuation reasons. An extremely significant difference was found ($H [9, 26] = 48.5310, p < .0001$). Specific continuation reasons can be found in Table 11, listed in order of importance according to mean ranks determined by the Kruskal-Wallis One-Way Analysis of Variance. Multiple comparisons were calculated

with the Siegal and Castellan test; the minimum difference in ranks necessary for significance was 34.28. A complete listing of multiple comparisons results may be found in Table 12.

Table 11
High School Continuers' Responses, Reasons I Continue

Continuation Reason	Kruskal-Wallis Mean Rank
I like the kind of music we play	170.3462
I like performing in concerts outside of class	164.6923
I have room in my schedule for it	153.8846
I think I am a good musician	149.4423
I like my orchestra teacher	142.0800
My friends are in orchestra	137.7885
My family can afford to buy/rent my instrument	116.9423
I will have the same orchestra teacher next year	107.5962
That's what my parents want	83.5769
Orchestra is something that is "cool" at my school	74.1154

Table 12
High School Continuers' Responses, Multiple Comparisons, Reasons I Continue

Continuation Reason	Was More Important Than...	<i>p</i>
I like the kind of music we play	Orchestra is something that is "cool" at my school	< .001
	That's what my parents want	
	My family can afford to buy/rent my instrument	< .01
I like performing in concerts outside of class	I will have the same orchestra teacher next year	< .01
	Orchestra is something that is "cool" at my school	< .001
	That's what my parents want	
I have room in my schedule for it	My family can afford to buy/rent my instrument	< .05
	I will have the same orchestra teacher next year	< .001
	That's what my parents want	
I think I am a good musician	My family can afford to buy/rent my instrument	< .05
	I will have the same orchestra teacher next year	< .05
	That's what my parents want	
I like my orchestra teacher	I will have the same orchestra teacher next year	< .05
	Orchestra is something that is "cool" at my school	< .001
My friends are in orchestra	That's what my parents want	< .01
	Orchestra is something that is "cool" at my school	< .01
My family can afford to buy/rent my instrument	Orchestra is something that is "cool" at my school	< .05

When listed in order of response frequency and importance rating, most of the continuation reasons held the same approximate position. However, the highest in terms of frequency (“my friends are in orchestra”) ranked in the bottom half of the list when ordered by importance rating. Conversely, “I like performing in concerts outside of class” held a high position when ranked by importance rating, but was eighth on the list when ordered by frequency.

Research Question #3.

Which continuation/discontinuation reasons were selected more frequently and with higher importance by middle school continuers?

Chi-square analysis of the frequency of reasons other students continue indicated a significant difference in the frequency with which reasons were selected ($X^2 [9, N = 31] = 17.570, p = .0405$). The specific continuation reasons and their frequencies may be found in Table 13. Subsequent Chi-square multiple comparisons revealed that “I like performing in concerts outside of class” and “I like the kind of music we play” were both selected significantly more often than the bottom three continuation reasons. A complete listing of multiple comparisons results may be found in Table 14.

Table 13
Middle School Continuers' Responses, Reasons Other Students Continue

Continuation Reason	Frequency
I like performing in concerts outside of class	25
I like the kind of music we play	23
I think I am a good musician	20
My friends are in orchestra	19
That's what my parents want	14
I like my orchestra teacher	14
I will have the same orchestra teacher next year	12
My family can afford to buy/rent my instrument	11
Orchestra is something that is "cool" at my school	11
I have room in my schedule for it	9

Table 14
Middle School Continuers' Responses, Multiple Comparisons, Reasons Other Students Continue

Continuation Reason	Was More Frequent Than...	<i>p</i>
I like performing in concerts outside of class	I have room in my schedule for it	.0061 *
	Orchestra is something that is "cool" at my school	.0196 *
	I will have the same orchestra teacher next year	.0326 *
I like the kind of music we play	I have room in my schedule for it	.0133 *
	Orchestra is something that is "cool" at my school	.0396 *
	I will have the same orchestra teacher next year	.0630
I think I am a good musician	I have room in my schedule for it	.0411 *
My friends are in orchestra	I have room in my schedule for it	.0588

* significant at < .05

Chi-square analysis of the list of reasons other students discontinue indicated no significant difference in the frequency with which reasons were selected ($\chi^2 [9, n = 31] = 9.625, p = .3817$). The specific discontinuation reasons and their frequencies

may be found in Table 15. Since no significant difference was discovered, multiple comparisons were unnecessary.

Table 15
Middle School Continuers' Responses, Reasons Other Students Discontinue

Discontinuation Reason	Frequency
My friends are not in orchestra	20
I think I am a bad musician	20
My family cannot afford to buy/rent my instrument	19
I do not like my orchestra teacher	17
I do not like the kind of music we play	17
I do not have room in my schedule for it	17
Orchestra is something that it "un-cool" at my school	16
I do not like performing in concerts outside of class	15
That's what my parents want	13
I will have a different orchestra teacher next year	6

Kruskal-Wallis One-Way Analysis of Variance was used to analyze the Likert ratings of personal continuation reasons. An extremely significant difference was found ($H [9, 31] = 55.4104, p < .0001$). Specific continuation reasons can be found in Table 16, listed in order of importance according to mean ranks determined by the Kruskal-Wallis One-Way Analysis of Variance. Multiple comparisons were calculated with the Siegal and Castellan test; the minimum difference in ranks necessary for significance was 37.32. A complete listing of multiple comparisons results may be found in Table 17.

Table 16
Middle School Continuers' Responses, Reasons I Continue

Continuation Reason	Kruskal-Wallis Mean Rank
I like performing in concerts outside of class	211.1000
I like my orchestra teacher	199.6833
I like the kind of music we play	193.7258
I think I am a good musician	185.7903
I will have the same orchestra teacher next year	142.3387
My friends are in orchestra	134.3710
I have room in my schedule for it	128.1935
My family can afford to buy/rent my instrument	125.0645
Orchestra is something that is "cool" at my school	117.1452
That's what my parents want	110.8710

Table 17
Middle School Continuers' Responses, Multiple Comparisons, Reasons I Continue

Continuation Reason	Was More Important Than...	<i>p</i>
I like performing in concerts outside of class	That's what my parents want	
	My family can afford to buy/rent my instrument	
	Orchestra is something that is "cool" at my school	< .001
	I have room in my schedule for it	
	My friends are in orchestra	
	I will have the same orchestra teacher next year	< .01
I like my orchestra teacher	That's what my parents want	
	My family can afford to buy/rent my instrument	< .001
	Orchestra is something that is "cool" at my school	
	I have room in my schedule for it	
	My friends are in orchestra	< .01
	I will have the same orchestra teacher next year	
I like the kind of music we play	That's what my parents want	< .001
	Orchestra is something that is "cool" at school	
	My family can afford to buy/rent my instrument	
	I have room in my schedule for it	< .01
	My friends are in orchestra	
	I will have the same orchestra teacher next year	< .05
I think I am a good musician	That's what my parents want	< .001
	My family can afford to buy/rent my instrument	
	Orchestra is something that is "cool" at my school	< .01
	I have room in my schedule for it	
	My friends are in orchestra	
	I will have the same orchestra teacher next year	< .05

When listed in order of response frequency and importance rating, most of the continuation reasons held the same approximate position. However, two reasons that were solidly in the middle of the list when ordered by frequency

polarized when ordered by importance rating. “I like my orchestra teacher” ranked second when listed by importance rating, while “that’s what my parents want” moved to last place.

Research Question #4.

In what ways did middle and high school students respond differently to the survey?

Comparisons between the two age groups were made using Chi-square analysis of frequency data and Mann-Whitney U analysis of importance ratings. High school and middle school continuers responded significantly differently to six of the ten continuation reasons. However, no continuation reasons found to be significantly different via chi-square analysis of the frequency data (shown in Table 18) were found to be statistically different via Mann-Whitney U analysis of importance ratings (shown in Table 19), and vice versa. The difference between middle and high school ratings of “I have room in my schedule for it” was not significant ($Z = 1.10, p = .2731$), but it was the only reason for which high schoolers assigned higher importance than middle schoolers did. Though responses to “I like my orchestra teacher” and “that’s what my parents want” were not shown to be significantly different according to frequency analysis ($X^2 [1, n = 32] = 1.459, p = .2271$; $X^2 [1, n = 31] = 1.063, p = .3025$), responses to both reasons were significantly different when analyzed for importance ratings. Middle schoolers assigned higher importance to “Orchestra is something ‘cool’ at school” ($Z = -2.79, p = .0053$) “I like my orchestra teacher” ($Z = -2.68, p = .0074$) and “that’s what my parents want” ($Z = -2.28, p = .0226$) than high schoolers did. For a more complete comparison between

high school and middle school reasons, raw data from both groups are presented side by side in Table 20, in the order they appeared on the survey instrument.

Table 18
H.S. Continuers vs. M.S. Continuers, Reasons Other Students Continue

Continuation Reason	H.S. (n = 26) Frequency	M.S. (n = 31) Frequency	χ^2	p
I like performing in concerts outside of class	8	25	6.076	.0137 *
I have room in my schedule for it	17	9	4.097	.0430 *
Orchestra is something that is “cool” at my school	3	11	3.301	.0692
My friends are in orchestra	25	19	2.227	.1357
I like my orchestra teacher	18	14	1.459	.2271
My family can afford to buy/rent my instrument	5	11	1.331	.2487
That’s what my parents want	17	14	1.063	.3025
I think I am a good musician	14	20	0.270	.6034
I like the kind of music we play	18	23	0.048	.8258
I will have the same orchestra teacher next year	10	12	0.000	.9880

* significant at < .05

Table 19
H.S. Continuers vs. M.S. Continuers, Reasons I Continue

Continuation Reason	H.S. (n = 26) Mean Ranks	M.S. (n = 31) Mean Ranks	U_A	Z	p
Orchestra is something that is “cool” at my school	22.3	34.6	577.5	-2.79	.0053 *
I like my orchestra teacher	22.6	34.4	570.5	-2.68	.0074 *
That’s what my parents want	23.5	33.6	545.5	-2.28	.0226 *
I think I am a good musician	24.1	33.1	529.5	-2.02	.0434 *
I like performing in concerts outside of class	24.5	32.7	519.0	-1.29	.0643
I will have the same orchestra teacher next year	25.2	32.2	503.0	-1.10	.1118
I like the kind of music we play	25.9	31.6	484.0	-1.29	.1971
I have room in my schedule for it	31.7	26.8	334.0	1.10	.2713
My family can afford to buy/rent my instrument	27.1	30.6	452.5	-0.79	.4295
My friends are in orchestra	28.7	29.3	411.0	-0.12	.9045

* significant at < .05

Table 20
H.S. Continuers vs. M.S. Continuers, Frequency and Importance of Continuation Reasons

Because that's what my parents want			
	M.S. Continuers (<i>n</i> = 31)	H.S. Continuers (<i>n</i> = 26)	All Students (<i>N</i> = 65)
Frequency of Comment	14	17	34
Importance Rating Mean	2.9677	2.1538	2.6769
Importance Rating Standard Deviation	1.1968	1.4337	1.3931
Because I think I am a good musician			
	M.S. Continuers (<i>n</i> = 31)	H.S. Continuers (<i>n</i> = 26)	All Students (<i>N</i> = 65)
Frequency of Comment	20	14	36
Importance Rating Mean	4.2333	3.3600	3.7692
Importance Rating Standard Deviation	0.8309	1.0288	0.9645
Because my family can afford to buy/rent my instrument			
	M.S. Continuers (<i>n</i> = 31)	H.S. Continuers (<i>n</i> = 26)	All Students (<i>N</i> = 65)
Frequency of Comment	11	5	17
Importance Rating Mean	3.2258	2.8077	3.0615
Importance Rating Standard Deviation	1.0555	1.6005	1.4129
Because I like my orchestra teacher			
	M.S. Continuers (<i>n</i> = 31)	H.S. Continuers (<i>n</i> = 26)	All Students (<i>N</i> = 65)
Frequency of Comment	14	18	36
Importance Rating Mean	4.2333	3.3600	3.7778
Importance Rating Standard Deviation	1.1351	1.2207	1.3007
Because I like performing in concerts outside of class			
	M.S. Continuers (<i>n</i> = 31)	H.S. Continuers (<i>n</i> = 26)	All Students (<i>N</i> = 65)
Frequency of Comment	25	8	35
Importance Rating Mean	4.4000	3.8077	4.0476
Importance Rating Standard Deviation	0.9322	1.0961	1.0988
Because I like the kind of music we play			
	M.S. Continuers (<i>n</i> = 31)	H.S. Continuers (<i>n</i> = 26)	All Students (<i>N</i> = 65)
Frequency of Comment	23	18	43
Importance Rating Mean	4.1935	3.9231	3.9231
Importance Rating Standard Deviation	0.9458	0.7442	0.9891

Table 20, continued

Because orchestra is something that is “cool” at my school			
	M.S. Continuers (<i>n</i> = 31)	H.S. Continuers (<i>n</i> = 26)	All Students (<i>N</i> = 65)
Frequency of Comment	11	3	16
Importance Rating Mean	3.0000	1.9231	2.4615
Importance Rating Standard Deviation	1.3904	1.4401	1.5112
Because I have room in my schedule for it			
	M.S. Continuers (<i>n</i> = 31)	H.S. Continuers (<i>n</i> = 26)	All Students (<i>N</i> = 65)
Frequency of Comment	9	17	30
Importance Rating Mean	3.1613	3.5385	3.4462
Importance Rating Standard Deviation	1.3928	1.4207	1.4365
Because I will have the same orchestra teacher next year			
	M.S. Continuers (<i>n</i> = 31)	H.S. Continuers (<i>n</i> = 26)	All Students (<i>N</i> = 65)
Frequency of Comment	12	10	26
Importance Rating Mean	3.3226	2.6923	3.0000
Importance Rating Standard Deviation	1.5575	1.2890	1.4790
Because my friends are in orchestra			
	M.S. Continuers (<i>n</i> = 31)	H.S. Continuers (<i>n</i> = 26)	All Students (<i>N</i> = 65)
Frequency of Comment	19	25	57
Importance Rating Mean	3.2903	3.2308	3.2923
Importance Rating Standard Deviation	1.3215	1.4780	1.4222

The two groups did not respond to discontinuation reasons with any statistical difference (shown in Table 21). However, the near-significant differences in frequencies for “I think I am a bad musician” ($X^2 [1, n = 22] = 3.678, p = .0551$) and “that’s what my parents want” ($X^2 [1, n = 17] = 3.342, p = .0675$) indicated that middle schoolers selected these discontinuation reasons more often than high schoolers did.

Table 21
H.S. Continuers vs. M.S. Continuers, Reasons Other Students Discontinue

Discontinuation Reason	H.S. (n = 26) Frequency	M.S. (n = 31) Frequency	χ^2	p
I think I am a bad musician	12	20	3.678	.0551
That's what my parents want	4	13	3.342	.0675
I do not have room in my schedule for it	23	17	2.278	.1312
I do not like my orchestra teacher	18	17	0.477	.4898
Orchestra is something that is "un-cool" at my school	16	16	0.248	.6184
My family cannot afford to buy/rent my instrument	14	19	0.135	.7129
My friends are not in orchestra	15	20	0.107	.7433
I will have a different orchestra teacher next year	6	6	0.093	.7603
I do not like the kind of music we play	15	17	0.021	.8861
I do not like performing in concerts outside of class	13	15	0.007	.9310

Research Question #5.

Did a student's status as a first year player have an effect upon survey responses?

First-year players' responses to continuation reasons were examined using chi-square analysis of frequency data and Kruskal-Wallis One-Way Analysis of Variance of importance ratings. The specific continuation reasons are listed in order of frequency in Table 22 and in order of importance rating in Table 23. No reason emerged with significantly more frequency ($\chi^2 [9, n = 11] = 4.000, p = .9114$), nor was any reason rated with significantly higher importance ($H [9, 11] = 15.5460, p = .0770$). Likewise, Chi-square analysis of discontinuation reasons revealed no significant differences ($\chi^2 [9, n = 11] = 9.895, p = .3591$); specific discontinuation reasons and their frequencies are shown in Table 24. This lack of significance contrasts with the responses of high school continuers and middle school

continuers of all grades, in which significant differences were present. Also, of the three students in this study who indicated intent to discontinue with orchestra, two were first-year players.

Table 22
First-Year Continuers' Responses, Reasons Other Students Continue

Continuation Reason	Frequency
I like performing in concerts outside of class	7
My friends are in orchestra	7
I think I am a good musician	6
My family can afford to buy/rent my instrument	6
I like the kind of music we play	5
Orchestra is something that is "cool" at my school	5
That's what my parents want	4
I will have the same orchestra teacher next year	4
I like my orchestra teacher	3
I have room in my schedule for it	3

Table 23
First-Year Continuers' Responses, Reasons I Continue

Continuation Reason	Kruskal-Wallis Mean Rank
I like my orchestra teacher	79.3000
I like performing in concerts outside of class	65.2000
I like the kind of music we play	61.5000
I think I am a good musician	60.5909
I will have the same orchestra teacher next year	55.3182
I have room in my schedule for it	49.9545
My family can afford to buy/rent my instrument	48.5000
My friends are in orchestra	46.7727
Orchestra is something that is "cool" at my school	42.4091
That's what my parents want	38.6818

Table 24
First-Year Continuers' Responses, Reasons Other Students Discontinue

Discontinuation Reason	Frequency
My family cannot afford to buy/rent my instrument	7
I think I am a bad musician	6
That's what my parents want	5
I do not like performing in concerts outside of class	5
My friends are not in orchestra	5
I do not have room in my schedule for it	3
I do not like my orchestra teacher	2
I do not like the kind of music we play	2
Orchestra is something that is "un-cool" at my school	2
I will have a different orchestra teacher next year	1

Research Question #6.

What themes emerged from the free-response areas of the survey, and how are those themes related to age or continuation in orchestra?

Nine themes were extracted from middle and high school continuers' answers to the free-response portions of the survey. In order of prevalence as shown in Figure 3, these themes were Instrument, which included both the sound of the instrument and the physical act of playing it; Influence, which included the influence of family, friends, and authority figures within organizations; Adventure/Fun; Involvement, which included both the desire to belong to a group and to be active at school; Love of Music; Curricular, which included earning transcript credits at school as well as requirements for community music groups; Uniqueness; Mariachi; and Atmosphere.

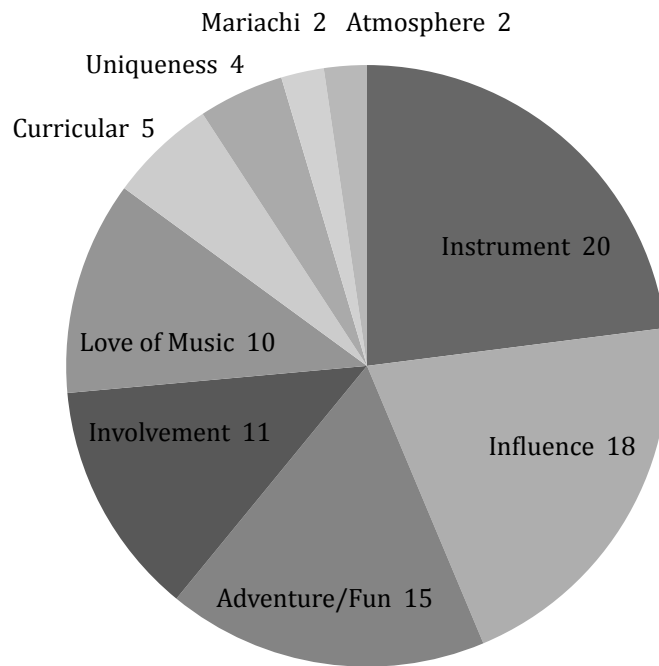


Figure 3. Number of mentions of qualitative themes

For the most part, the themes present in students' memories of joining orchestra were also mentioned in students' reasons to continue with orchestra, with the exception that Mariachi was given only as a joining reason, and Atmosphere was given only as an additional continuation reason. Additionally, Curricular and Atmosphere were mentioned only by high schoolers, while Mariachi was a unique response to the middle school group. A comparison between the two age groups, found in Figure 4, shows that middle schoolers mentioned the themes of Instrument and Adventure/Fun more often than high schoolers did; Involvement was a more prevalent theme for the older students.

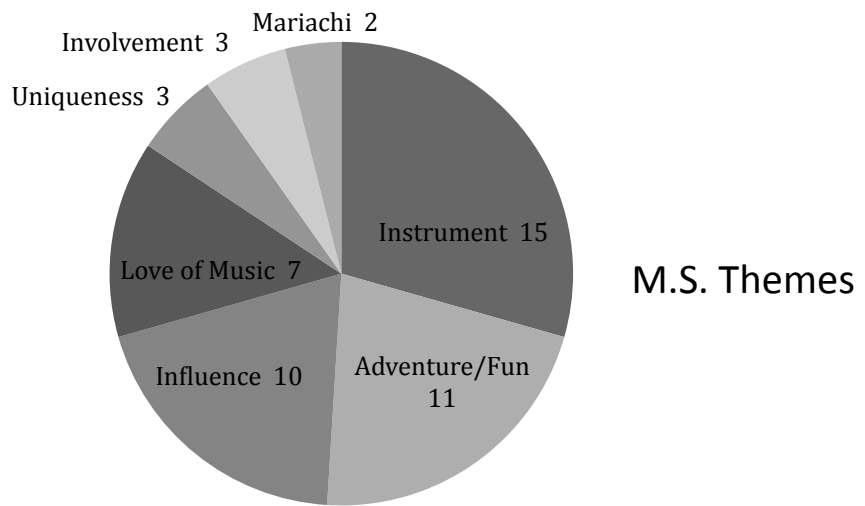
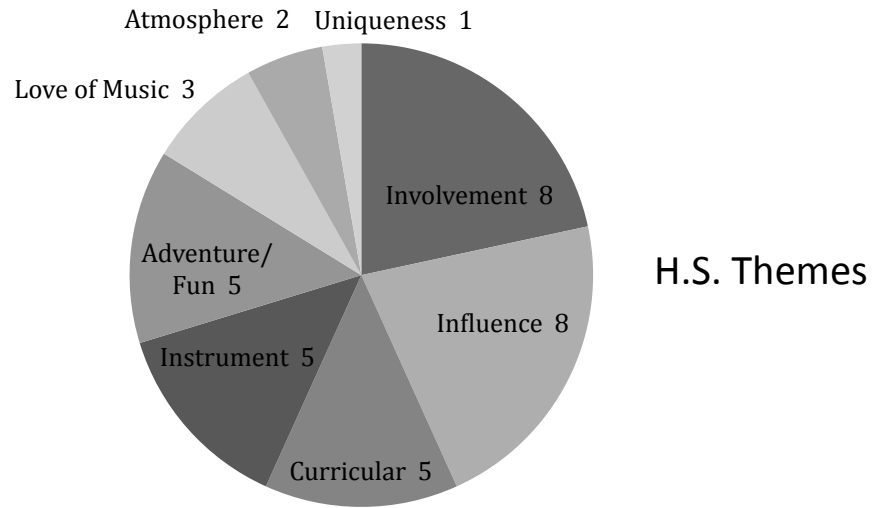


Figure 4. Number of mentions of qualitative themes, by age

Few responses were given to the optional question that asked for additional discontinuation reasons, and of those responses, few themes emerged. High schoolers indicated that time commitments would be problematic, and that perhaps being in orchestra was no longer fun; and two middle school continuers answered with the related concepts that students just might not want to be in orchestra anymore and that “they mite [sic] want to try something else.” Only one of the discontinuing middle school participants responded to this section of the survey, and she offered her intent to quit general orchestra class but continue playing violin in the school’s mariachi band. All three discontinuing middle school participants mentioned the theme of Influence as their primary joining reason.

Chapter V Discussion

Results of this study seem to indicate that while there are some differences between orchestra students of different ages, the greater differences may be between the continuation reasons themselves. Even when significant differences were found between the age groups' responses, considerable overlap still existed. The following is a discussion of the nuanced differences found by this study and recommendations for teachers and researchers, based on those conclusions.

Implications of Results and Suggestions for Further Research

Many of the continuation reasons appeared as frequently or were rated similarly by the middle and high school age groups. For example, both groups tended to rank friends, liking the teacher, and liking the class repertoire near the top of their lists in terms of frequency and importance. Even when significant differences were found between middle and high school responses, as in the case of "that's what my parents want" and "orchestra is something that is 'cool' at my school," those reasons still held similar positions in each group's respective list of importance. Perhaps neither group particularly cared about parental influence or whether or not orchestra was "cool," but high schoolers cared even less than middle schoolers. Also, significant differences between the ten reasons were strongest when responses were analyzed as one group, rather than broken up by grade level, suggesting that each age group's responses bolstered the other's. Had the responses

from each group been more divergent, the significance would have been diluted rather than enhanced when data were combined.

Though some results do show more agreement than disagreement between orchestra students of varying ages, one of the most fascinating differences between the groups is the degree to which continuation or discontinuation reasons emerge as significant. Older students' responses showed much higher significant differences than did responses of younger students. The first year players in this study were the youngest participants, and this group indicated no continuation or discontinuation reason with more frequency or more importance. Middle schoolers of all ages did respond to the reasons with significant differences; while their importance ratings were extremely significant, frequency of response to continuation reasons was just barely significant, and no discontinuation reason was selected more often. High school responses showed highly significant differences in all three areas for comparison between the reasons. This polarization of the reasons may suggest that high schoolers' convictions regarding orchestra membership have solidified or homogenized over time as compared to their younger counterparts, a result that echoes the findings of Cutietta and McAllister (1997). Because it appears that the younger students have more fluid opinions than high schoolers, orchestra teachers may be more likely to be capable of influencing their continuation decisions. Further research should be conducted to explore this possibility.

The three most frequent continuation reasons selected by middle schoolers involved the physical act of playing the instrument, and three of the top four reasons rated by importance did, too. Perhaps recruitment and retention efforts directed

towards this age group should focus upon the performance aspects of orchestra class. In contrast, when considering high school frequency responses, only one of the top half of continuation reasons involved the direct act of making music. Perhaps by this age, the meaning of orchestra has evolved to include something beyond strictly musical endeavors, and perhaps membership at the high school level is more socially or emotionally driven, a conclusion in alignment with the findings of Adderly, Kennedy, and Berz (2003), Eckel (1995) and Wayman (2006). While indeed there were more musical reasons in the top half of high school responses when ranked by importance ratings, they were still not as present as with the equivalent list for middle schoolers. Free-response portions of the survey also supported this finding; in discussing both why they joined orchestra and additional reasons to continue membership, middle schoolers mentioned Instruments more often than high schoolers did. High schoolers were more apt to cite Involvement. As in the limited-choice portion of the survey, high schoolers' answers to the free response portions also indicated a greater emphasis on school scheduling and curricular requirements than did middle schoolers'. Additional case studies or personal interviews with students regarding musical and non-musical facets of orchestra membership could elaborate upon the these findings.

Greatly intriguing about the results of this study is the apparent disconnect between how students responded to continuation reasons from the viewpoint of another student as opposed to their own reasoning. For example, high schoolers selected presence of friends in orchestra and parental influence as reasons "other students" might choose to continue with orchestra; in fact, "my friends are in

orchestra” was selected with such fervor that only one other reason from the list was not significantly different. However, both reasons were sorted much lower in terms of response to the Likert scales for personal importance. Also, “I like performing in concerts outside of class” was indicated infrequently as a reason “other students” might continue orchestra, but was second-most important in terms of personal importance ratings. Middle schoolers demonstrated this same disconnect. Two reasons selected with middling frequency (“I like my orchestra teacher” and “that’s what my parents want”) were polarized when sorted by Likert ratings. The former moved to second in terms of importance ratings, and the latter became the least important of the ten reasons. Not enough observations were made during this study to explain what may have caused these discrepancies, so further research is warranted.

Finally, the three discontinuers must be addressed. Due to the small group size, there was no consensus among these students on the limited-response areas of the survey. However, the most striking thing about their responses was the way in which they responded to the prompt “Tell the story of how you decided to join orchestra.” All three indicated being influenced by a friend or family member as their primary motivation to join. While this theme was also present in the responses of continuing students, it was the sole theme identified by the discontinuers. Perhaps the category Influence alone is not as strong or lasting of a continuation reason unless paired with other factors, as well. Although it is unfortunate to know that these three students will be leaving their respective orchestra programs, it is heartening to know that at least one of them will continue to play the violin in a

setting outside of traditional orchestra. Further research with discontinuing students is encouraged, both to investigate Influence as a factor and to gather data from a larger group of participants.

Limitations and Cautions

Due to the narrow scope of this study, results should be generalized with caution. All responses were limited to one school district within one city; therefore, participants may not accurately represent the population as a whole. Additionally, the survey's requirement of permission forms may have presented biased results in that only the most motivated orchestra students returned the forms and answered the survey. While one hopes that there are no more discontinuers in the orchestra programs than those identified by this study, it is likely that any further discontinuing students were unmotivated to put forth the effort to return paperwork for an optional activity in a class that they have already decided to terminate.

That the study took place in the middle of the school year, rather than a time when students make active decisions about school schedules, might mean that students had not fully formed their opinions about continuing or discontinuing orchestra membership before responding to the survey. Finally, it is possible that the Likert-type scale used in this study cannot be used to compare different age groups; the consistently more enthusiastic ratings given by middle schoolers in this study may suggest that the scale was interpreted differently by different age groups.

Conclusion

For the most part, it seems that as orchestra students grow older, they add dimensions to their existing concepts of orchestra class, rather than completely altering their views: importance is reassigned but never completely removed from previous reasons to be in the ensemble. High schoolers extend that redistributed importance to newfound non-musical aspects of orchestra membership, such as social and curricular needs. Orchestra directors must recognize the ways in which middle and high school students view orchestra differently, though the differences may be subtle and personal.

Interestingly, although all continuation and discontinuation reasons included in this study's survey were based upon previously-determined significant predictors (Allen, 1981; Morehouse, 1987; Papinchak, 1982), several were shown to be non-significant in this study. Particularly, parental influence, changing teachers, affordability of an instrument, and peer influence from outside of the orchestra appeared to be non-important to the participating students in this study. This might mean that regardless of what actually happens, a student's own perception matters most. Perhaps he or she is unaware that an issue such as family budget even exists, or perhaps he or she cannot imagine that an existing issue such as parental or peer influence could truly shape his or her actions. Being aware of the power that perception has upon orchestra students of all ages, and using that awareness wisely, may be the key to a director's recruitment or retention of the one student that nearly gets away.

References

- Adderley, C., Kennedy, M, & Berz, W. (2003). "A home away from home": The world of the high school music classroom. *Journal of Research in Music Education*, 51, 190-205.
- Allen, B.E. (1981). Student dropout in orchestra programs in three school systems in the state of Arkansas. (Doctoral dissertation, Northeast Louisiana University, 1981). *Dissertation Abstracts International*, 42 (08) , 3405A.
- Baker, V.D. (2007). Retention of membership in high school music ensembles. *Texas Music Education Research 2007*.
- Bruenger, S.D. (2002). The relationship of goal and reward structure and the meaning non-select choir members attach to their choral experience. *Texas Music Education Research 2002*.
- Bruenger, S.D. (2009). School-wide goal environment and continuing motivation in music. *Update: Applications of Research in Music Education*, 27, 3-11.
- Corenblum, B., & Marshall, E. (1998). The band played on: Predicting students' intentions to continue studying music. *Journal of Research in Music Education*, 46, 128-140.
- Costa-Giomi, E., Flowers, P.J., & Sasaki, W. (2005). Piano lessons of beginning students who persist or drop out: Teacher behavior, student behavior, and lesson progress. *Journal of Research in Music Education*, 53, 234-247.
- Cutietta, R.A., & McAllister, P.A. (1997). Student personality and instrumental participation, continuation, and choice. *Journal of Research in Music Education*, 45, 282-294.
- Davidson, J. W., Sloboda, J. A., & Howe, M. J. A. (1995). The role of parents and teachers in the success and failure of instrumental learners. *Bulletin of the Council for Research in Music Education*, 127, 40-44.
- Eckel, S. (1995). Student perspectives: Personal values and rationales for high performance music courses. *Dialogue in Instrumental Music Education*, 19, 1-19
- Farrar, R. C. (2011, February). *The effect of age on student reasons to continue orchestra: a preliminary study*. Poster session presented at the meeting of Texas Music Educators Association, San Antonio, Texas.

- Fredrickson, W. E. (1997). Social influence and effects on student perception and participation in music. *Update: Applications of Research in Music Education*, 15, 29-32.
- Geringer, J. M., & Allen, M. L. (2004). An analysis of vibrato among high school and university violin and cello students. *Journal of Research in Music Education*, 52, 167-178.
- Geringer, J. M., Allen, M. L., & MacLeod, R. B. (2005). Initial movement and continuity in vibrato among high school and university string players. *Journal of Research in Music Education*, 53, 248-259.
- Geringer, J. M., MacLeod, R. B., & Allen, M. L. (2010). Perceived pitch of violin and cello vibrato tones among music majors. *Journal of Research in Music Education*, 57, 351-363.
- Geringer, J. M., & Witt, A. C. (1985). An investigation of tuning performance and perception of string instrumentalists. *Bulletin of the Council for Research in Music Education*, 85, 90-101.
- Gillespie, R. A. (1987). The measurement and development of the skill to diagnose and correct common problems in violin bowing. *Contributions to Music Education*, 14, 29-35.
- Gillespie, R. A. (1989). A comparison of the relative effects of structured video training and teacher-directed instruction on the development of violin bowing diagnostic skills. *Dialogue in Instrumental Music Education*, 13, 87-97.
- Gillespie, R. A. (1988). Identification of factors for evaluating upper string instrument spiccato bowing and a comparison of two instructional approaches. *Dialogue in Instrumental Music Education*, 12, 21-33.
- Gillespie, R. A. (1991). String teachers' diagnostic skills and their students' performance competencies. *Journal of Research in Music Education*, 39, 282-289.
- Gillespie, R. A. (1997). Ratings of violin and viola vibrato performance in audio-only and audiovisual presentations. *Journal of Research in Music Education*, 45, 212-220.
- Hamann, D. L, Frost, R., & Wieters, M. (2002). Factors contributing to perceived tuning independence among middle school and high school string players. *Journal of String Research*, 2.

- Hamann, D. L., Lauver, J., & Asher, K. (2006). Perceived and actual tuning ability of middle school string students. *Journal of String Research*, 3, 43-54.
- Hartley, L.A. (1996). Influence of starting grade and school organization on enrollment and retention in beginning instrumental music. *Journal of Research in Music Education*, 44, 304-318.
- Hartley, L.A., & Porter, A.M. (2009). The influence of beginning instructional grade on string student enrollment, retention, and music performance. *Journal of Research in Music Education*, 56, 370-384.
- Hurley, C. G. (1995). Student motivations for beginning and continuing/discontinuing string music instruction. *Quarterly Journal of Music Teaching and Learning*, 6(1), 44-55.
- Hylton, J. B. (1981). Dimensionality in high school student participants' perception of the measuring of choral singing experience. *Journal of Research in Music Education*, 29, 287-303.
- Kinney, D.W. (2010). Selected nonmusic predictors of urban students' decisions to enroll and persist in middle school band programs. *Journal of Research in Music Education*, 57, 334-350.
- Martignetti, A.J. (1965). Causes of elementary instrumental music dropouts. *Journal of Research in Music Education*, 13, 177-183.
- McCarthy, J.F. (1980). Individualized instruction, student achievement, and dropout in an urban elementary instrumental music program. *Journal of Research in Music Education*, 51, 59-69.
- McGuire, D.C. (1965). Why undergraduate music students withdraw. *Journal of Research in Music Education*, 28, 51-53+149.
- Morehouse, T.L. (1987). The relationship of selected attitudinal factors to dropout and retention in beginning string students. (Doctoral dissertation, University of Houston, 1987). *Dissertation Abstracts International*, 49 (04) , 0757A.
- Mowery, W.F. (1993). An investigation of the relationship between selected personality variables and retention of students in the string orchestra program. (Doctoral dissertation, The Ohio State University, 1993). *Dissertation Abstracts International*, 54 (12) , 4385A.
- Neill, S.L. (2005). Motivating factors for students participating in high school orchestra programs and music enrichment activities. *Texas Music Education Research 2005*.

- North, A.C., Hargreaves, D.J., & O'Neill, S.A. (2000). The importance of music to adolescents. *British Journal of Educational Psychology*, 70, 255-272.
- Papinchak, A.E. (1992). The identification of factors that influence the retention of middle school string students in the commonwealth of Pennsylvania. (Doctoral dissertation, The Pennsylvania State University, 1992). *Dissertation Abstracts International*, 53 (07) , 2287A.
- Perkins, D.L. (1998). Factors relating to participation in public school string programs (Doctoral dissertation, University of North Texas, 1998). *Dissertation Abstracts International*, 59 (12) , 4388A.
- Reimer, B. (1997). Music education in the twenty-first century. *Music Educators Journal*, 84, 33-38.
- Scheib, J. W. (2006). Lindy's story: One student's experience in middle school band. *Music Educators Journal*, 92 (5), 32-36.
- Sichivitsa, V. O. (2003). College choir members' motivation to persist in music: Application of the Tinto model. *Journal of Research in Music Education*, 51, 330-341
- Sichivitsa, V. O. (2004). Music motivation: A study of fourth, fifth, and sixth graders' intentions to persist in music. *Contributions to Music Education*, 31, 27-41.
- Smith, C. M. (1985). The effect of finger placement markers on the development of intonation accuracy in beginning string students. *Dialogue in Instrumental Music Education*, 9, 62-70.
- Smith, C. M. (1987). The effect of finger placement markers on the development of intonation accuracy in fourth- and fifth-grade beginning string students. *Dialogue in Instrumental Music Education*, 11, 71-85.
- Smith, C. M. (1995). Development of performance pitch accuracy of string students. *Bulletin of the Council for Research in Music Education*, 124, 13-23.
- Stewart, J.L. (2005). Factors related to students' decisions to continue in band. *Contributions to Music Education*, 32, 59-74.
- Warnock, E. C. (2004). Determining attraction to band: An initial step in efficient recruiting for band directors. *Southern Music Education Journal*, 1, 95- 111.

Wayman, V. E. (2004). An exploratory investigation of three middle school general music students' beliefs about music education. *Bulletin of the Council for Research in Music Education*, 160, 26-37.

Wayman, V.E. (2006). The meaning of music education to middle school general music students. *Texas Music Education Research 2006*.

Appendix A
Human Subjects Approval



TEXAS TECH UNIVERSITY
Vice President for Research

January 21, 2011

Janice Killian
Music - V&PA
Mail Stop: 2033

Regarding: 502672 The Effect of Age on Self-Reported Student Reasons for Continuing or Discontinuing Membership in School String Ensembles

Dr. Janice Killian:

The Texas Tech University Protection of Human Subjects Committee has approved your proposal referenced above. The approval is effective from January 21, 2011 to December 31, 2011. This expiration date must appear on all of your consent documents.

We will remind you of the pending expiration approximately eight weeks before December 31, 2011 and to update information about the project. If you request an extension, the proposal on file and the information you provide will be routed for continuing review.

Sincerely,



Rosemary Cogan, Ph.D., ABPP
Protection of Human Subjects Committee

Box 41075 | Lubbock, Texas 79409-1075 | T 806.742.3905 | F 806.742.3947 | www.vpr.ttu.edu
An EEO/Affirmative Action Institution

Appendix B
Recruitment Email

To *[Name of Director]*;

I am currently working on research for my thesis to complete a Masters of Music Education degree at Texas Tech University. My goal is to survey middle and high school students, learn why they choose to continue or discontinue with orchestra, and compare their results to find out if their reasoning varies with age.

I would like to survey your orchestra students *[Name of School]*. In order to do this, I would conduct one on-campus visit. Students will complete an anonymous questionnaire about reasons to stay in or not stay in orchestra. The names of schools, students, and teachers will be kept confidential; only the anonymous group responses will be used in the final report. These final results can be made available to you, if you wish.

I anticipate the survey taking only 15 minutes of class time. While I know that you have lots to prepare and rehearse with your ensembles at this time of year, I would greatly appreciate your help with this very important project.

If you are willing to participate, please respond via email (reb.farrar@ttu.edu). Include in your reply how many students are in your program and at what times the orchestras meet. At that time I will send a PDF of parent/student consent forms that must be filled out before the survey. Hard copies of the consent form may be delivered if you prefer. Finally, please let me know if I need to contact your administration for further permission. I would be happy to do this for you.

This study is taking place with the approval of the Texas Tech University Institutional Review Board for Human Subjects. If further information is needed, please feel free to contact myself (reb.farrar@ttu.edu) or Dr. Janice Killian, Chair of Music Education for the School of Music at Texas Tech University (janice.killian@ttu.edu).

Thank you for your time and consideration,

Rebecca Farrar
Texas Tech University MMed Student
reb.farrar@ttu.edu
214.232.8486

Appendix C

Parent Consent and Student Assent Forms

**Texas Tech University
School of Music
Consent Form for Research Project**

Supervising Professor: Dr. Janice Killian
janice.killian@ttu.edu (806) 742-2270 ext. 264

Researcher: Rebecca Farrar
reb.farrar@ttu.edu (214) 232-8486

Your son or daughter has been asked to participate in a research project, and we would greatly appreciate his or her contribution. This form describes the project and what is asked of you and your student. Please read it carefully and, if willing, sign and return this document.

What is the purpose of this project?

We would like to know more about why students decide to stay in or leave orchestra programs.

What will my student be asked to do?

Your student will be asked to fill out a survey that will take about 15 minutes of class time. The survey will ask about your student's background in orchestra, and then ask your student to rate the importance of reasons to stay in or not to stay in the school orchestra.

Are there any risks?

We do not expect your student to encounter any risks other than those experienced in everyday life.

How is privacy protected?

Your student will not be asked to record his or her name or other individually-identifying information on the survey paper. Surveys will be identified by a coded number instead. Individual responses will not be shared publicly; only results from the entire group will be reported.

Is this project voluntary?

Yes, of course. You or your student may choose not to participate at any time, even if you have already turned in the signed permission form. Dr. Killian and the Protection Board have reviewed the survey questions and think your student can answer them comfortably. However, your student may skip any question on the survey or quit at any time without consequences.

Can I find out the results of this study?

If you want, we will send you an update with our findings once data has been collected and analyzed. This may take several months. We cannot provide you with individual results for your student.

What if I have more questions?

You may contact Dr. Killian at (806) 742-2270, ext. 264. For questions about your rights as a participant or about injuries caused by this research, contact the Texas Tech Institutional Review Board for Protection of Human Subjects, Office of the Vice President for Research, Texas Tech University, Lubbock, Texas 79409, or call (806) 742-3905.

Parent/Guardian Consent: I give permission for my child to participate in this research project. I may withdraw my consent at any time.

Parent/Guardian Name (PRINT)

Student Name (PRINT)

Parent/Guardian Signature

Date

This consent form is not valid after December 31, 2011

Student Assent Form

You have been asked to help in a project about orchestra students.

If you do the project, you will fill out a short survey during class. The survey is about why kids decide to stay in orchestra and why they decide not to stay in.

You can skip any question that makes you uncomfortable.

Helping with this project is your choice. If you don't want to do the project, that's okay. Nothing bad will happen to you.

Yes, I want to help with this project

Student Name

Date

This form is not valid after December 31, 2011

Appendix D
Survey Instrument

Do not write your name anywhere on this packet

PART I: BACKGROUND INFORMATION

1. Current grade level in school: _____

2. Grade level when you joined orchestra: _____

3. Main instrument in orchestra: _____

4. Tell the story of how you decided to join orchestra:

5. How likely are you to take school orchestra next year? Circle a number on the scale.

1	2	3	4	5
Not Likely At All To Take Orch		Not Sure		Very Likely To Take Orch

PART II: OTHER STUDENTS' REASONS (NOT YOUR OWN)

6. If other students decide to take orchestra next year, what reasons might be important to them?

— Check as many or as few boxes as you need.

- That's what their parents want
- They think they are good musicians
- Their family can afford to buy/rent an instrument
- They like their orchestra teacher
- They like performing in concerts outside of class
- They like the kind of music played in orchestra
- Orchestra is something "cool" at school
- There is room in their schedule for it
- They will have the same orchestra teacher next year
- Their friends are in orchestra
- There are more reasons. They are:

7. If other students decide not to take orchestra next year, what reasons might be important to them?

— Check as many or as few boxes as you need.

- That's what their parents want
- They think they are bad musicians
- Their family cannot afford to buy/rent an instrument
- They do not like their orchestra teacher
- They do not like performing in concerts outside of class
- They do not like the kind of music played in orchestra
- Orchestra is something "un-cool" at school
- There is no room in their schedule for it
- They will have a different orchestra teacher next year
- Their friends are not in orchestra
- There are more reasons. They are:

PART III: REASONS TO TAKE ORCHESTRA NEXT YEAR

Why **might you take** orchestra next year?

Circle a number to show how important each reason is to you.

— If you **might NOT take** orchestra next year, predict how a classmate would answer.

Why **might you take** orchestra next year?

8. Because that's what my parents want.

1	2	3	4	5
not important to me		so-so		very important to me

9. Because I think I am a good musician.

1	2	3	4	5
not important to me		so-so		very important to me

10. Because my family can afford to buy/rent my instrument.

1	2	3	4	5
not important to me		so-so		very important to me

11. Because I like my orchestra teacher.

1	2	3	4	5
not important to me		so-so		very important to me

12. Because I like performing in concerts outside of class.

1	2	3	4	5
not important to me		so-so		very important to me

13. Because I like the kind of music we play.

1	2	3	4	5
not important to me		so-so		very important to me

14. Because orchestra is something that is "cool" at my school.

1	2	3	4	5
not important to me		so-so		very important to me

15. Because I have room in my schedule for it.

1	2	3	4	5
not important to me		so-so		very important to me

16. Because I will have the same orchestra teacher next year.

1	2	3	4	5
not important to me		so-so		very important to me

17. Because my friends are in orchestra.

1	2	3	4	5
not important to me		so-so		very important to me

18. There are other reasons. They are:

PART IV: REASONS NOT TO TAKE ORCHESTRA NEXT YEAR

Why **might you NOT take** orchestra next year?

Circle a number to show how important each reason is to you.

— If you **might take** orchestra next year, predict how a classmate would answer.

Why **might you NOT take** orchestra next year?

19. Because that's what my parents want.

1	2	3	4	5
not important to me		so-so		very important to me

20. Because I think I am a bad musician.

1	2	3	4	5
not important to me		so-so		very important to me

21. Because my family cannot afford to buy/rent my instrument.

1	2	3	4	5
not important to me		so-so		very important to me

22. Because I do not like my orchestra teacher.

1	2	3	4	5
not important to me		so-so		very important to me

23. Because I do not like performing in concerts outside of class.

1	2	3	4	5
not important to me		so-so		very important to me

24. Because I do not like the kind of music we play.

1	2	3	4	5
not important to me		so-so		very important to me

25. Because orchestra is something that is "un-cool" at my school.

1	2	3	4	5
not important to me		so-so		very important to me

26. Because I do not have room in my schedule for it.

1	2	3	4	5
not important to me		so-so		very important to me

27. Because I will have a different orchestra teacher next year.

1	2	3	4	5
not important to me		so-so		very important to me

28. Because my friends are not in orchestra.

1	2	3	4	5
not important to me		so-so		very important to me

29. There are other reasons. They are:

Appendix E

Script for Administering Survey

[collect permission forms, take participating students to a practice room/office]

Good morning/afternoon. I am Ms. Farrar from Texas Tech, and I'm here to learn more about orchestra students in Lubbock. In a minute, you will receive a survey packet. No need to write your name in the packet. You can skip any question that makes you uncomfortable. Remember, I am the only person who will read your answers. When you get your packet, fill out the front page and wait for more instructions.

[hand out survey packets to students]

[wait while students write]

Now turn to the back of that page. This page asks, "If other students decide to take or not to take orchestra next year, which reasons might be important to them? Check however many boxes you need." When you finish this page, please wait for more instructions. Any questions?

[pause]

Please begin.

[wait while students write]

Now turn to the rest of the survey. Here, you will answer questions about your own reasons to take or not to take orchestra next year. Let's read the instructions together. "Why might you take orchestra next year? Circle a number to show how important each reason is to you. If you are someone who might NOT take orchestra next year, answer this page how a classmate would answer." The last page works the same way, but asks why not to take orchestra next year. Please answer both pages. Any questions?

[pause]

When you finish the survey, please hand it in to me and return to class.

Appendix F

Raw Importance Ratings All Participants

Table 25
"That's what my parents want"

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		
1		3		
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1		3		
1		3		
1		3		
1		3		
		3		
		3		
		3		
		3		
		3		

Table 27
 "My family can afford to buy/rent an instrument"

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5

Table 28
"I like my orchestra teacher"

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1		3	4	5
1		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
			4	5
			4	5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5

Table 29
“I like performing in concerts outside of class”

1	2	3	4	5
1		3	4	5
1		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5

Table 32
"I have room in my schedule for it"

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
		3	4	5
		3	4	5
		3		5
		3		5
		3		5
		3		5
				5
				5
				5
				5
				5
				5

Table 33
"I will have the same orchestra teacher next year"

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
1		3		5
		3		
		3		
		3		
		3		
		3		

Table 34
"My friends are in orchestra"

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1		3	4	5
		3		5
		3		5
		3		5
		3		5
		3		5
		3		5
		3		5
		3		5
				5
				5

Appendix G

Raw Importance Ratings High School Continuers

Table 35
"That's what my parents want"

1	2	3	4	5
1		3		5
1		3		5
1		3		
1		3		
1		3		
1		3		
1				
1				
1				
1				
1				
1				
1				
1				
1				

Table 36
"I think I am a good musician"

1	2	3	4	5
	2	3	4	5
		3	4	5
		3	4	
		3	4	
		3	4	
		3	4	
		3	4	
		3	4	
		3		
		3		

Table 37
"My family can afford to buy/rent my instrument"

1	3	4	5
1	3	4	5
1	3	4	5
1	3	4	5
1	3	4	5
1	3		
1			
1			
1			

Table 38
"I like my orchestra teacher"

1	2	3	4	4
1	2	3	4	4
1		3	4	4
		3	4	4
		3	4	
		3	4	
		3	4	
			4	
			4	

Table 39
"I like performing in concerts outside of class"

1	2	3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3	4	5
		3		5
		3		5
		3		5

Table 40
"I like the kind of music we play"

	3	4	5
	3	4	5
	3	4	5
	3	4	5
	3	4	5
	3	4	5
	3	4	
		4	
		4	
		4	
		4	

Table 41
"Orchestra is something that is 'cool' at my school"

1	2	3	4	5
1		3		5
1		3		5
1		3		
1				
1				
1				
1				
1				
1				
1				
1				
1				
1				
1				
1				
1				

Table 42
"I have room in my schedule for it"

1	2	3	4	5
1	2	3	4	5
1		3	4	5
1		3	4	5
			4	5
			4	5
			4	5
			4	5

Table 43
"I will have the same orchestra teacher next year"

1	2	3	4	5
1	2	3	4	5
1	2	3	4	
1		3	4	
1		3	4	
1		3		
1		3		
		3		
		3		

Table 44
"My friends are in orchestra"

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2		4	5
	2		4	5
	2		4	5
				5

Appendix H

Raw Importance Ratings Middle School Continuers

Table 45
"That's what my parents want"

1	2	3	4	5
1	2	3	4	5
1	2	3		5
1	2	3		5
	2	3		5
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		

Table 46
"I think I am a good musician"

2	3	4	5
	3	4	5
	3	4	5
	3	4	5
	3	4	5
	3	4	5
		4	5
		4	5
		4	5
		4	5
		4	5
		4	
		4	

Table 47
"My family can afford to buy/rent my instrument"

1	2	3	4	5
1	2	3	4	5
	2	3	4	5
		3	4	5
		3		5
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		
		3		

Table 48
"I like my orchestra teacher"

1	2	3	4	5
	2	3	4	5
		3	4	5
		3	4	5
			4	5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5
				5

Table 49
"I like performing in concerts outside of class"

1	3	4	5
	3	4	5
	3	4	5
		4	5
		4	5
		4	5
		4	5
		4	5
			5
			5
			5
			5
			5
			5
			5
			5
			5
			5
			5
			5

Table 50
"I like the kind of music we play"

2	3	4	5
	3	4	5
	3	4	5
	3	4	5
	3	4	5
	3	4	5
	3		5
	3		5
			5
			5
			5
			5
			5
			5
			5
			5
			5

Table 51
"Orchestra is something that is 'cool' at my school"

1	2	3	4	5
1	2	3	4	5
1	2	3		5
1	2	3		5
1		3		5
1		3		5
		3		5
		3		
		3		
		3		
		3		
		3		
		3		

Table 52
"I have room in my schedule for it"

1	2	3	4	5
1	2	3	4	5
1		3	4	5
1		3	4	5
1		3	4	5
1		3		5
		3		5
		3		
		3		
		3		
		3		

Table 53
"I will have the same orchestra teacher next year"

1	2	3	4	5
1		3	4	5
1		3	4	5
1		3		5
1		3		5
1		3		5
1		3		5
		3		5
		3		5
				5

Table 54
"My friends are in orchestra"

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1		3	4	5
		3		5
		3		5
		3		5
		3		5
		3		
		3		
		3		
		3		

Appendix I

Raw Importance Ratings First-Year Player Continuers

Table 55
"That's what my parents want"

2	3	4	5
2	3		5
2	3		
2	3		

Table 56
"I think I am a good musician"

2	3	4	5
	3	4	5
		4	5
		4	5

Table 57
"My family can afford to buy/rent my instrument"

	3	4	5
	3	4	5
	3		
	3		
	3		
	3		
	3		
	3		

Table 58
"I like my orchestra teacher"

	3	4	5
			5
			5
			5
			5
			5
			5
			5

Table 59
"I like performing in concerts outside of class"

1	3	4	5
		4	5
		4	5
			5
			5

Table 60
"I like the kind of music we play"

	2	3	5
		3	5
		3	5
		3	5
			5
			5

Table 61
"Orchestra is something that is 'cool' at my school"

1	2	3	5
	2	3	5
		3	5
		3	
		3	

Table 62
"I have room in my schedule for it"

1	3	4	5
1	3	4	5
1			5
			5

Table 63
"I will have the same orchestra teacher next year"

1	3	4	5
1	3		5
	3		5
			5
			5

Table 64
"My friends are in orchestra"

1	2	3	4	5
	2	3	4	5
		3		5

Appendix J
Free-Response Survey Answers

High School Continuers

Tell the story of how you decided to join orchestra

- "I joined LYSO because of parents, and with LYSO I had to do school orchestra.
LYSO - Lubbock Youth Symphony Orchestra"
- "I started playing the violin when I was around 8. Orchestra just seemed to be a good way to be a better player."
- "They were offering it at my school and decided to join"
- "because I wanted to play an instrument and orchestra will help me stay motivated to practice"
- "I was actually waiting for band sign-ups but then I heard the orchestra and decided to do that in school."
- "No story - just did to play violin in different setting"
- "I wanted to join a musical group and I didn't like band or choir"
- "I started playing violin when I was six years old. When I was in 5th grade, my teacher thought I was ready for orchestra. So, I joined a youth orchestra and then my school orchestra. I enjoyed it, so I stuck with it."
- "An orchestra teacher visited my school and fell in love with orchestra then."
- "All the other kids were doing it"
- "I saw that my grandmother's neighbor was playing her violin outside & I loved the sound. I decided that playing the violin was something I wanted to do."
- "My sister played the viola all through junior high and high school and it looked like fun so I wanted to too"
- "My older brother [Derek] had played cello before me, and encouraged me to do the same. When time came for me to choose my schedule for the sixth grade, I picked orchestra and began to take lessons."
- "Once I got to middle school there was the opportunity to join orchestra. I had played violin for 6 years already and one requirement in the Lubbock Youth Orchestra was to be involved in the school orch. As well."
- "My school shows upcoming 3rd graders all the instruments they can chose from & I chose cello because I like the lower register that it can play. I didn't like violin because it was higher. Also I wanted to be the only girl playing cello in my school orchestra. Also I joined because my parents didn't want me to join because it cost money."
- "In fifth grade, some students from Tech came and played for us. I thought the cello was the coolest instrument and began taking lessons."

More reasons "other students" might take orchestra next year

- "It will be a fun experience"
- "being in the top orchestra"
- "Yol, fine arts credit, enjoy instrument"
- "they are required by their youth orchestra to join a school orchestra"

- "they enjoy playing their instrument and can't outside of school"
- "it is a good extracurricular activity to be involved in. It would look good on a college transcript."

More reasons I might take orchestra next year

- "being in the top performing orchestra"
- "Because orchestra is the only not-stressful class I take"
- "Because I like the environment of orchestra"

Middle School Continuers

Tell the story of how you decided to join orchestra

- "My uncle was in orchestra so I wanted to join"
- "I wanted to try out something new and cause we get to go play for everybody"
- "Well I began when I was in 4th grade. Some Tech students came to my school to represent String Project. I heard the bass and I knew I wanted to play. I did string project for two years and continued in Varsity in Middle School"
- "I just picked this class cuz it sounded fun and after about 6 weeks I liked it and picked it again for 7th grade with advance and I am still having fun"
- "I wanted to play something when I was in 5th grade so I just picked something in 6th that is when I joined orchestra"
- "I decided to join orchestra and play the bass because it would be unique it's not everyday you see a girl playing the bass"
- "I just like the instrument and wanted to get in orchestra"
- "I enjoyed the sound and all the different instruments, especially the violin, because it had a nice sound, and looked cool"
- "Well I joined because of several reasons. One my brother was in orchestra and two because I always loved the sound of the orchestra and that's how it started."
- "I love love love music I can listen to music at anytime of the day I love country music and all the soft music so I pritty much love all sorts of music but not all that rap crap that is what me and my daddy say, so I joined orchestra because I love all good music."
- "The reason I decided to join orchestra because it seemed fun"
- "Mr. [Isaac] came to my school and showed us all the instruments. And he was awesome."
- "I always wanting to join, and I love string instruments, and playing songs, also I love music and orchestra"

- "I always liked the sound of the music. I also became apart so I could be in Mariachi one of my dreams was to be a singer in Mariachi and play the violin."
- "I wanted to play in mariachi. So with orchestra I can learn to play the violin."
- "I decide to join orchestra because I thought it would be fun and intresting"
- "Because I like play instruments"
- "I loved hearing the LSO (Lubbock Symphony orchestra) They inspired me to listen more and eventually play the violin. I also wanted to take it because I love music and want to do something differet. :) "
- "well it all realy started when I was a beginner in Band and I would see some Orchestra students play and I had decided to join."
- "My mom wanted me to join orchestra so I have the opertunity that she never had."
- "A orchestra came to my school and played and then I want to play the violin."
- "Well I joined orchestra because I wanted to play an string instrament. Me and my family discusted it and I chose the violin."
- "My older sister is in orchistra and I thout I wood give it a try and she played violin to and I liked thhe violin"
- "I thought it would be interesting if I learned how to play an instrument so when I went to orchestra he introduced me and I fell in love with the violin"
- "I wanted to have a career with it. My brother joined it so I decided to plus my friend were in it so that's why I decided to join orchestra."
- "I was reading a book about a girl who played cello & I became interested"

More reasons "other students" might take orchestra next year

- "it's fun you will enjoy it"
- "It is fun"
- "they like orchestra"
- "They might want to follow their sisters or brother."
- "Playing the violin is fun and a good way to relax."
- "thay like plaing the insturmnts thay play now"
- "The fast peices are fun"
- "to learn to play unique instruments"

More reasons I might take orchestra next year

- "I wanted to try it out"
- "I want to have music in my life. It makes me feel a different way other than P.E."
- "I like plaing the violin"
- "It is fun"
- "Because I love to play"

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